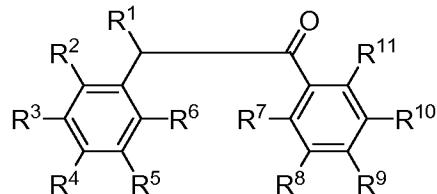


## **AMENDMENTS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **In the claims:**

1. (Cancelled) A composition for variably releasing fragrances comprising in combination:
  - (a) a first organic agent that undergoes an intramolecular photochemical rearrangement that is induced by sunlight radiation to release or from a second agent that is a fragrance; and
  - (b) a carrier for topical administration to skin or hair or administration to articles of clothing and other textiles via washing or spraying methods.
2. (Original) A photoresponsive fragrance composition comprising:
  - (a) a compound having the formula



wherein

R<sub>1</sub> is substituted ester (--OC(O)R<sub>12</sub>), substituted phosphate (--OP(O)(R<sub>19</sub>)(OR<sub>20</sub>)), substituted thiol (--S-R<sub>12</sub>), substituted amine (--NH-R<sub>12</sub>) or an other substituted chemical group covalently linked to a fragrance or fragrance molecule;

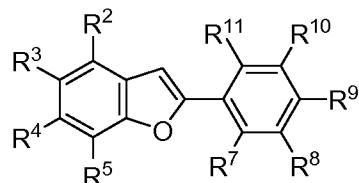
R<sub>2</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy or substituted alkoxy;  
R<sub>3</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy or substituted alkoxy;  
R<sub>4</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy or substituted alkoxy;  
R<sub>5</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy or substituted alkoxy;  
R<sub>6</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy or substituted alkoxy;  
R<sub>7</sub> is hydrogen, alkyl, aryl, alkoxy or substituted alkoxy;  
R<sub>8</sub> is hydrogen, alkyl, aryl, alkoxy or substituted alkoxy;  
R<sub>9</sub> is hydrogen, alkyl, aryl, alkoxy or substituted alkoxy;

R<sub>10</sub> is hydrogen, alkyl, aryl, alkoxy or substituted alkoxy;  
R<sub>11</sub> is hydrogen, alkyl, aryl, alkoxy or substituted alkoxy;  
R<sub>12</sub>, is a fragrance or molecule that imparts a fragrance;  
R<sub>19</sub> is a hydrogen and R<sub>20</sub> is a fragrance or molecule that imparts a fragrance  
R<sub>19</sub> is a fragrance or molecule that imparts a fragrance and R<sub>20</sub> is a hydrogen  
wherein at least one of R<sub>2</sub> or R<sub>6</sub> is hydrogen;  
wherein at least one of R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, or R<sub>6</sub> is hydroxy or substituted alkoxy; and

(b) a carrier for topical administration to skin or hair or direct administration to articles of clothing and other textiles or via a washing or spraying method.

3. (Withdrawn) A photoresponsive fragrance composition comprising:

(a) a sunlight absorbing compound having the formula



wherein

R<sub>2</sub> is hydrogen, hydroxy (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>3</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>4</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>5</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>7</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

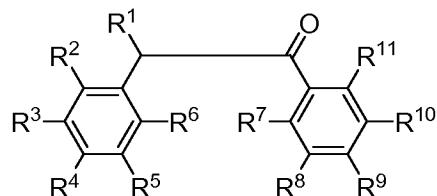
R<sub>8</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>9</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;  
R<sub>10</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;  
R<sub>11</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;  
wherein at least one of R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, or R<sub>5</sub> is hydroxy or substituted (C<sub>1-20</sub>)alkoxy;

- (b) a carrier for topical administration or direct administration to articles of clothing and other textiles or via routine washing;
- (c) a fragrance or fragrance molecule

4. (Original) A composition useful for releasing fragrances of a desired scent comprising:

- (a) a compound having the formula



wherein

R<sub>1</sub> is substituted ester (--OC(O)R<sub>12</sub>), substituted phosphate (--OP(O)(R<sub>19</sub>)(OR<sub>20</sub>)), substituted thiol (--S-R<sub>12</sub>), substituted amine (--NH-R<sub>12</sub>) or an other substituted chemical group covalently linked to a fragrance or fragrance molecule

R<sub>2</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy, or substituted alkoxy;  
R<sub>3</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy, or substituted alkoxy;  
R<sub>4</sub> is hydrogen, hydroxy alkyl, aryl, alkoxy, or substituted alkoxy;  
R<sub>5</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy, or substituted alkoxy;  
R<sub>6</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy, or substituted alkoxy;  
R<sub>7</sub> is hydrogen, alkyl, aryl, alkoxy, or substituted alkoxy;  
R<sub>8</sub> is hydrogen, alkyl, aryl, alkoxy, or substituted alkoxy;  
R<sub>9</sub> is hydrogen, alkyl, aryl, alkoxy, or substituted alkoxy;  
R<sub>10</sub> is hydrogen, alkyl, aryl, alkoxy, or substituted alkoxy;  
R<sub>11</sub> is hydrogen, alkyl, aryl, alkoxy, or substituted alkoxy;

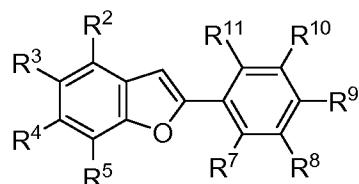
R<sub>12</sub> is a fragrance or fragrance molecule;  
R<sub>19</sub> is hydrogen or a fragrance molecule; and  
R<sub>20</sub> is hydrogen or a fragrance molecule  
wherein at least one of R<sub>2</sub> or R<sub>6</sub> is hydrogen;  
wherein at least one of R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub> or R<sub>6</sub> is hydroxy or substituted alkoxy; and

(b) a carrier for topical administration to skin or hair or direct administration to articles of clothing and other textiles or via washing or spraying.

5. (Original) The composition according to claim 4 further comprising an auxiliary fragrance agent having a different fragrance than the photoreleased fragrance.

6. (Original) The composition according to claim 4 further comprising a photo rearranged product having a desirable fragrance.

7. (Withdrawn) A composition useful for releasing a desirable fragrance comprising:  
(a) an sunlight absorbing compound having the formula



wherein

R<sub>2</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>3</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>4</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>5</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>7</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>8</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>9</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>10</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>11</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

wherein at least one of R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, or R<sub>5</sub> is hydroxy or substituted (C<sub>1-20</sub>)alkoxy and

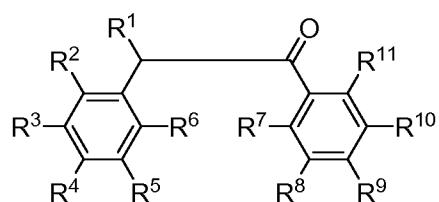
(b) a carrier for topical administration or direct administration to articles of clothing and other textiles or via routine washing.

8. (Withdrawn) The composition according to claim 7 wherein R<sub>2</sub> is hydrogen; R<sub>3</sub> is hydrogen, (C<sub>1-20</sub>) alkoxy, or substituted (C<sub>1-20</sub>)alkoxy; R<sub>4</sub> is hydrogen; R<sub>5</sub> is (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy; R<sub>7</sub> is hydrogen; R<sub>8</sub> is hydrogen; R<sub>9</sub> is hydrogen; R<sub>10</sub> is hydrogen; and R<sub>11</sub> is hydrogen.

9. (Withdrawn) The composition according to claim 7 further comprising an auxiliary fragrance agent having a different fragrance than compound (A).

10. (Original) A photoresponsive fragrance composition comprising:

(a) a compound having the formula



wherein

R<sub>1</sub> is substituted ester (--OC(O)R<sub>12</sub>), substituted phosphate (--OP(O)(R<sub>19</sub>)(OR<sub>20</sub>), substituted thiol (--S-R<sub>12</sub>), substituted amine (--NH-R<sub>12</sub>) or an other substituted chemical group covalently linked to a fragrance or fragrance molecule.;

R<sub>2</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>3</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>4</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>5</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>6</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>7</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>8</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>9</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>10</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>11</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>12</sub>, is a fragrance or molecule that imparts a fragrance

R<sub>19</sub> is hydrogen or a fragrance molecule

R<sub>20</sub> is hydrogen or a fragrance molecule

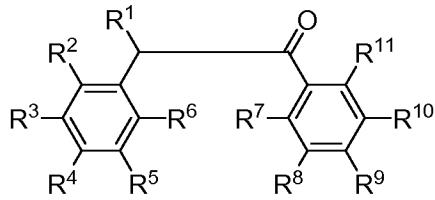
wherein at least one of R<sub>2</sub> or R<sub>6</sub> is hydrogen;

wherein at least one of R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, or R<sub>6</sub> is hydroxy or substituted (C<sub>1-20</sub>)alkoxy; and

(b) a carrier for topical administration or direct administration to articles of clothing and other textiles or via routine washing.

11. (Original) A composition useful releasing a desired fragrance comprising:

(a) a compound having the formula



wherein

R<sub>1</sub> is substituted ester (--OC(O)R<sub>12</sub>), substituted phosphate (--OP(O)(R<sub>19</sub>)(OR<sub>20</sub>), substituted thiol (--S-R<sub>12</sub>), substituted amine (--NH-R<sub>12</sub>) or an other substituted chemical group covalently linked to a fragrance or fragrance molecule.;

R<sub>2</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>3</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>4</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>5</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>6</sub> is hydrogen, hydroxy, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>7</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>8</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>9</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>10</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>11</sub> is hydrogen, (C<sub>1-20</sub>)alkyl, (C<sub>5-12</sub>)aryl, (C<sub>1-20</sub>)alkoxy, or substituted (C<sub>1-20</sub>)alkoxy;

R<sub>12</sub> is a fragrance or a molecule that imparts a fragrance

R<sub>19</sub> is hydrogen or a fragrance molecule

R<sub>20</sub> is hydrogen or a fragrance molecule

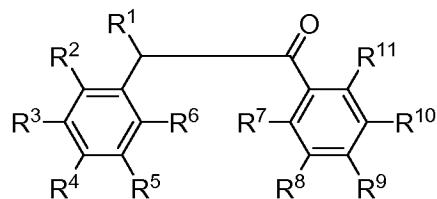
wherein at least one of R<sub>2</sub> or R<sub>6</sub> is hydrogen;

wherein at least one of R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub> or R<sub>6</sub> is hydroxy or substituted (C<sub>1-20</sub>)alkoxy; and

(b) a carrier for topical administration or direct administration to articles of clothing and other textiles or via routine washing.

12. (Original) A photoresponsive fragrance comprising:

(a) a compound having the formula



wherein

R<sub>1</sub> is a fragrance molecule;

R<sub>2</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy or substituted alkoxy;

R<sub>3</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy or substituted alkoxy;

R<sub>4</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy or substituted alkoxy;

R<sub>5</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy or substituted alkoxy;

R<sub>6</sub> is hydrogen, hydroxy, alkyl, aryl, alkoxy or substituted alkoxy;

R<sub>7</sub> is hydrogen, alkyl, aryl, alkoxy or substituted alkoxy;

R<sub>8</sub> is hydrogen, alkyl, aryl, alkoxy or substituted alkoxy;

R<sub>9</sub> is hydrogen, alkyl, aryl, alkoxy or substituted alkoxy;

R<sub>10</sub> is hydrogen, alkyl, aryl, alkoxy or substituted alkoxy;

R<sub>11</sub> is hydrogen, alkyl, aryl, alkoxy or substituted alkoxy;

wherein at least one of R<sub>2</sub> or R<sub>6</sub> is hydrogen;

wherein at least one of R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, or R<sub>6</sub> is hydroxy or substituted alkoxy; and

(b) a carrier for topical administration or direct administration to article of clothing and other textiles or via routine washing.

13. (Withdrawn) A method of controlling the release of a fragrance by incorporating

the compositions of any one of claims 1 to 12 into clothing or textiles by spraying the composition onto the clothing or textiles or washing the clothing or textiles in a solution of the composition.

14. (Withdrawn) A method according to claim 13, wherein the composition is sprayed onto the clothing or textiles.

15. (Withdrawn) A method according to claim 13, wherein the composition is incorporated into the clothing or textiles via washing.

16. (Currently Amended) A composition according to any one of claims [[1,]] 2, [[3,]] 4, 5, or 6, wherein the composition is formulated for spraying onto the skin.

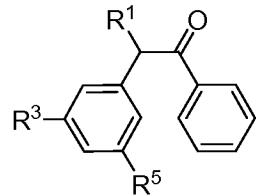
17. (Currently Amended) A composition according to any one of claims [[1,]] 2, [[3,]] 4, 5, or 6, wherein the composition is formulated for rubbing onto the skin.

18. (Withdrawn) A method of controlling the release of a fragrance by applying the compositions of any one of claims 1 to 12 onto the skin or hair of a mammal.

19. (Withdrawn) A method according to claim 16, wherein the mammal is a human.

20. (Withdrawn) A method according to claim 16, wherein the mammal is a companion animal.

21. (Currently Amended) A composition according to any one of claims 1, 2, 4, 5, 6, 10, 11, or 12, ~~16, or 17~~, wherein the compound is of the formula:



22. (New) A composition according to claim 21, wherein the composition is formulated for spraying onto the skin.

23. (New) A composition according to claim 21, wherein the composition is formulated for rubbing onto the skin.